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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
VANDEVOORDE, P. et al.

Serial No.: 09/444,968
Filing Date: November 22, 1999

For: COATING COMPOSITION BASED ON A HYDROXY GROUP-CONTAINING FILM FORMING POLYMER, A POLYISOCYANATE COMPOUND AND A DIOL

Docket: ACO2587P1US

Examiner: Bissett

Group Art Unit: 1773

Assistant Commissioner of Patents
Washington, D.C. 20231

RESPONSE

Sir:

In response to the Office Action of November 29, 2001, Applicants provide the following remarks for entry in this application. This response is filed in conjunction with a Request For Continued Examination pursuant to 37 CFR 1.114 and in accordance with 37 CFR 1.111.

Presently, claims 1-17 are pending, though claims 7-11 and 13-17 have been withdrawn from consideration.

As a first matter, Applicants acknowledge and thank the Examiner for allowing claim 6.

Applicant will now respond to the Examiner's comments paragraph by paragraph.

2. - 7. Applicants acknowledge the citations to 35 U.S.C. and the prior office action, dated March 6, 2001 for support of th Examiner's rejection of claims 1-2, 4-5 and 12 under 35 U.S.C. 102(e) and claim 3 under 35 U.S.C. 103. Applicants respectfully traverse these rejections for the reasons set forth in their response dated August 31, 2001 and as further explained below.

9. - 11. The Examiner erroneously takes the position that the polyurethane dispersion formed in example 8 and 9 of Ho "could inherently be used as a coating".

The Examiner takes this position without providing either scientific basis or motivation for one skilled in the art to use Ho in such a way. Even assuming arguendo that Ho could function as a coating composition the Examiner has **failed to provide a motivation as to why** one skilled in the art would look to Ho for a coating!

More importantly, as previously stated, Ho can not function as a coating as assumed by the Examiner. If one calculates the theoretical number average molecular weight (Mn) of the polyurethane formed from the compositions of examples 8 and 9 of Ho after complete isocyanate conversion it would be clear that Ho **can not** function as a coating as in the present invention. In Example 8 a Mn of 286 is obtained, and in Example 9 a Mn of 314 is obtained. For a skilled person it is clear that a composition with such a low molecular weight is completely unsuitable as a coating composition. In order to coat a substrate with a useful coating layer, significantly higher molecular weights of the binder polymer are required (at least about one order of magnitude higher). It can therefore be concluded that the compositions disclosed in table 5, examples 8 and 9, of Ho are not compositions which can be used as a coating, regardless whether the unreacted compositions or the fully reacted compositions are considered.

Further, referring again to the compositions of table 5, examples 8 and 9 of Ho, the Examiner erroneously states that "the reference does not indicate instability of the mixture. The fact that the components would react at room temperature after a period of time supports the fact that the composition would be stable for a period of time". Office Action, p. 3.

In examples 8 and 9 of Ho reference is made to the manner of example 1, which reads in col. 29, ll. 13-14, "The reaction mixture was allowed to exotherm to approximately 85°C".

In case of a mixture, which is exotherming to 85°C by the heat of chemical reaction **of its components**, it is beyond dispute that there is clear indication of instability. Furthermore, due to the development of heat it would be **dangerous** for a user to handle the composition, which further distracts from the suitability of the compositions of examples 8 and 9 of table 5 of Ho as a coating composition.

As set forth in Applicants' previous reply and the support found above, it can be summarized that there is no **indication, motivation or expectation of success** for one skilled in the art to use the Ho compositions of table 5, examples 8 and 9, as coating compositions. If, for the sake of argument, one would try to use these compositions, reacted or unreacted, as coating compositions one would be confronted with compositions which are unsuitable to coat a substrate. In case of the unreacted compositions, not only are they unsuitable, they are also **dangerous** for the user if used as coating composition. Consequently, these compositions cannot anticipate the coating composition of the current invention.

Since the above calculations are straightforward from the Examples cited by the Examiner, no declaration is provided herewith, however, if the Examiner believes it would be useful, a declaration will be provided.

For at least the reasons set forth above, a prima facie showing of obviousness has not been established under th prior art of Ho. The mere fact that the cited references may be modified does not establish a *prima facie* case of obviousness based on such modification absent a suggestion in the cited art of the desirability of the modification. In re Fritch, 23 USPQ 2d 1780, 1783-1784 (Fed. Cir. 1992).

Obviousness cannot be established merely by locating a reference, which describe various aspects of an invention without also providing evidence of the motivating force, which would impel one skilled in the art to do what the present invention.

Applicants submit that it is clear that the applied reference, taken as a whole, fails to provide such motivating force, and actually teaches away from the present invention.

In view of the amendments and remarks herein, the papers submitted previously, the present application is believed to be in condition for allowance, which action is respectfully requested.

Respectfully submitted,

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